

G3ZME
G6ZME

www.TDARS.org.uk

www.TelfordHamfest.co.uk

July/August. 2020

July 15	Webex 'Chat' & TDARS FM net 144.600 MHz. From about 7:45pm
July 22	Webex Presentation: Details TBA. It could be YOU !
July 29	Webex 'Chat' & TDARS FM net 144.600 MHz. From about 7:45pm
August 5	Committee (Webex) Meeting. FM net 144.600 MHz. 8pm
August 12	Webex presentation: Building up your QRP (low power) station Guest presenter Steve Hartley G0FUW, Chairman G-QRP club.
August 19	Webex 'Chat' & TDARS FM net 144.600 MHz. From about 7:45pm
August 26	Webex Presentation: Tour of Criggion (ex) Radio Station by Robert 2W0FOI. Starting around 8pm.
September 2	Committee (Webex) Meeting. FM net 144.600 MHz. 8pm
September 9	Webex Presentation: Details TBA
September 16	Webex 'Chat' & TDARS FM net 144.600 MHz. From about 7:45pm
September 23	Webex Presentation: Details TBA

**For "Beyond Exams" scheme (Club or Individual) —enquiries to Graham G7LMF
For Morse Training and Morse Proficiency Tests Martyn G3UKV or Eric M0KZB.
Radio Amateur Exams- Latest: Contact Graham G7LMF training@tdars.org.uk**

VILLAGE HALL, MALTHOUSE BANK, LITTLE WENLOCK, TELFORD, SHROPSHIRE. TF6 5BG

Editorial

As you can see from the front page, we need offers of talks and presentations on-line to fill the vacant dates. The Committee is aiming for twice-monthly Webex 'specials', ideally the 2nd and 4th Wednesday of each month—although we can work around that if unavoidable. The Webex format has worked surprisingly well, and when (when?) things get back to normal it seems likely that 'conferencing' and YouTube will continue to be used when it is judged to be helpful. In particular, I can see a time when speakers who live far from Telford will be able to share their thoughts, ideas and practice with us at minimal inconvenience. For those without internet, or dodgy connectivity, the presentation would be projected at LWVH, hitherto our usual meeting place. Meanwhile, if any of you would share what you are currently dabbling in, or have given a past talk to a radio club or group, please let one of the Committee know about it. Graham (G7LMF) has already given Webex guidance to both viewers and presenters, including 'test runs' of techniques like 'screen sharing' as well as basic camera work. Graham is available at Training@tdars.org.uk or his personal email address (or even 'phone/text !)

The Committee has also decided to simply cancel the TDARS 2020 AGM, which should have taken place last March 25th. All the committee members listed at the foot of this page have agreed to continue in post for the time being. If any member has a comment or objection to this decision, they are asked to contact the Society's Secretary, John M0JZH. (secretary@tdars.org.uk) Realistically, face-to-face meetings at LWVH are unlikely to resume in the immediate future. The LWVH committee met recently, and have circulated nearly 5 pages of guidance for organisers and visitors to the Village Hall; it does not make great reading . . . but necessary, of course.

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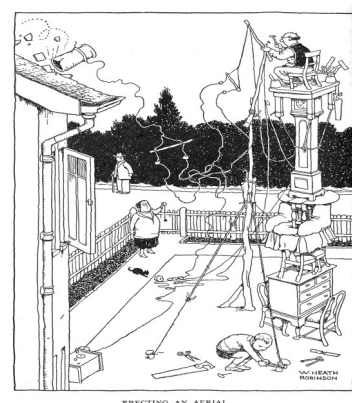
Another useful / interesting Internet link given recently on our groups.io Reflector:-

Brian G6UDX gave this link for a wide range of 'pinouts' for various devices: <https://pinouts.ru/>

And to cheer us all up,
a couple of A.R. cartoons
doing the rounds:

The first, an eyesight test for those of us keen on CW (morse) mode

The second, taken from a BBC Yearbook of 1928, titled 'erecting an Aerial' Note the plumb line!

**TELFORD & DISTRICT AMATEUR RADIO SOCIETY : 2019-21**

CHAIRMAN: Simon Bird G0UFE (telfordslivewire@hotmail.co.uk Tel: 01952 401018)

VICE-CHAIRMAN: Martyn Vincent G3UKV (ukv@ukv.me.uk Tel:01952 255416)

SECRETARY: John Humphreys M0JZH (m0jzh@yahoo.co.uk Tel:07824 737716)

TREASURER: Paul Athersmith M0PLA (paul.athersmith@gmail.com Tel:07966 969230)

CURATOR : Don Nicholls M0TBQ (donsnicholls@outlook.com Tel: 01952 411680)

TRAINING and 'Beyond Exams': Graham Cowan G7LMF (training@tdars.org.uk)

NEWSLETTER EDITOR: Martyn Vincent G3UKV (01952 255416 or 07421 001166)

PUBLICITY/WEBMASTER : Dave GOCER (davekh@gmail.com)

Committee: Brian G6UDX; Graham G7LMF; Ian M0IRP; Village Hall Committee Liaison officer Martin 2E0TRO. QSL Manager Paul M0PNN; Assist Curator: Chris 2E0EOH; Trophies/Certs: Martyn G3UKV.



Qtc: News & Information



**TDARS MEETINGS EVERY WEDNESDAY EVENING HELD NORMALLY AT
LITTLE WENLOCK VILLAGE HALL
NO MEETINGS AT LWVH UNTIL FURTHER NOTICE (Covid-19)**

**Please note: A current membership card may be required to borrow
TDARS equipment. Please return borrowed equipment promptly .**

Following the positive measures taken so far to try and keep TDARS activities warm, a small group comprising John M0JZH, Graham G7LMF and Simon G0UFE have put their ideas together to try to help newer or less experienced members develop their understanding, interest and practical applications within the hobby.

John writes: (6 July)

"At the last committee meeting we spoke about training, and how with the new online Foundation exam in particular had no real physical tasks to accomplish, and whilst at the time we could not come up with anything that seemed entirely achievable whilst not being able to keep the social distancing, we (Simon, Graham and myself) have been having some regular conversations on how we could achieve something approaching filling that gap. What we have decided to give a go to is creating a series of YouTube videos that would showcase some actual experience in an elmer kind of a way.

Over the last week we have been putting together some topics that we feel would be of benefit to those new to our hobby, and so we would like to reach out to those and offer some of our collective experience to show 'how to' kind of videos. We appreciate that there are numerous videos online that do this already, however to have videos done by our clubmates may make this more accessible, and also provide the Q&A that responses to the general YouTube 'trolls' provide – including belittling, "you should know that" etc etc. We wish to create a more private space that people that we invite can view (to the exclusion of all others). So, Simon, Graham and I would like to reach out for any input that you feel that you could offer, and to those who feel that a few pointers would not go amiss in the personal development of your radio lives, a few ideas that you would like to have some help with.

If you are interested, please could you let us know, and we can put a webex together to explain further, and also the topics that we have discussed. training@tdars.org.uk "



Quick response from Mike G3JKX:

Well done on the initiative. Put me down for Advance tuition/mentoring please.

A reply from Peter G4URT (6 July)

"Would it be an idea to poll members of TDARS who would be willing to 'elmer' other members of the club. This could include such topics as metal bashing, data modes, SMD soldering (oh boy, could I do with some help there!) etc etc. Like most clubs I'm sure that there are members out there doing their own thing but not making themselves known?

This form of help would not be in the form of Youtube type videos but personal contact this damn Covid aggro notwithstanding. Maybe a database of willing members with skills sets, contact details, willing to meet face to face, travel to help etc. could be formulated?

I put this forward because of my own experiences with EME. When I started there was nobody within 50 miles of where I lived at the time that I could visit and get answers. Everything was done online (via MoonNet.Com) and the amount of 1) stupid questions I asked and 2) the immense help I got from amateurs worldwide was outstanding. Without such help I would have really, really struggled.

I agree that Youtube (and anti-social media as well) are havens for the ignorant and terminally stupid to sound off with anonymity and no fear of any comebacks. Therefore, a private arrangement is vital. However, such a database as I'm advocating would be an extra facility that could be available for those subjects that are not suited to a video type explanation."

Furthermore, Robert 2W0FOI made an offer:- (July 7)

" If anyone from TDARS wants a trip out across the border into Wales to visit Criggion MW, I am happy to receive them, but no more than 2 vehicles (4 people) at a time. Social distancing must be applied. I am also happy to give instruction on the use of various electronic test equipment, (modulation meters, spectrum analysers, scopes signal generators etc). How about club members building a challenging radio project (or similar), applying practical skills and knowledge learnt?

I am happy to provide tooling and workshop facilities. A shame I'm so far away from core members. "



Little Wenlock Village Hall committee met recently (July 7th) to discuss the limited option of opening the Community Hall on July 14th. Our LWVH liaison officer, Martin 2E0TRO was present, and has forwarded the strict Covid-19 conditions (5 pages!) that would be applied. The TDARS committee want to return when it is safe to do so, and when conditions are not too onerous. Many of our members are in the older age bracket, or have other health issues, so there will not be an immediate return. However, the situation will be kept under review.

Derek G0EYX (past Chairman TDARS) - made a call to Martyn G3UKV to tell him that **Stan Houlding G0BYA passed away** on 28th May, aged 96. Stan used to come to club from his Staffordshire QTH nearly every Wednesday, along with Derek. He was a staunch CW man, active mostly on the HF/VHF bands. He earned a G-QRP club certificate for 50 CW QSOs on 2 metres, where morse is a minority sport. Stan was a very fit and active man, who could still do press-ups at age 95! Unfortunately, big 'C' came along in recent years, and he sold his A.R. gear and recently ended up in a hospice, where he died. A really nice guy - 73 Stan, RIP.

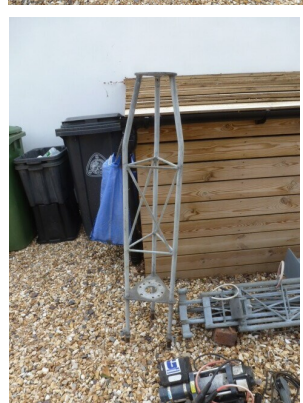
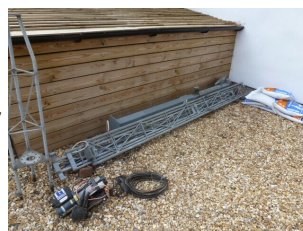
For Sale:

A complete mast system that is now redundant and is reclining in my driveway. I bought this up with me from JO00dv when I moved hoping that I could use it again. However, the orientation of the house / garden means I need something a bit taller hence a 40' HD groundpost was concreted in yesterday which makes this one redundant.

I bought it second-hand about 15 years ago with the ground-post repaired. Contrary to perceived wisdom I replaced the wires with stainless steel ones which still seem to be good. I also replaced that somewhat feeble hand winch with an electric one from Goodwinch. Also included is about 10m x 2 of 40A wire and Wiska box to connect the winch to a 12v power supply - I used a leisure battery. The winch is controlled using a hand controller which is also included.

This mast has been used to support a large 2m EME array amongst other things at a site just in from the south coast and is still in excellent condition which is testament to its construction and galvanising. I've put a couple coats of Galvafruid on the ground-post as it was showing signs of surface rust but nothing drastic. To top it all there is also an original copy of the instructions! I'm asking £1000 which seems steep but these things are rare nowadays (I should know trying to track a mast down locally) plus ***how many come with the post and an electric winch ?***

I have attached some photos to this email and any seriously interested persons can view it at my Wem QTH. Full details on QRZ.com for full address.



**Thanks for Newsletter input this time:
Peter G4URT, John M0JZH, Robert 2W0FOI, Simon G0UFE,
Mike G6DFD, Martyn G3UKV, Paul M0PNN, Paul G8AQA
Next edition Sept/Oct 2020
Please keep it coming— Don't just leave it to someone else !**

Anyday/Anytime: GB3TF FM Voice/Digital (Fusion) Repeater: Output 433.200 MHz

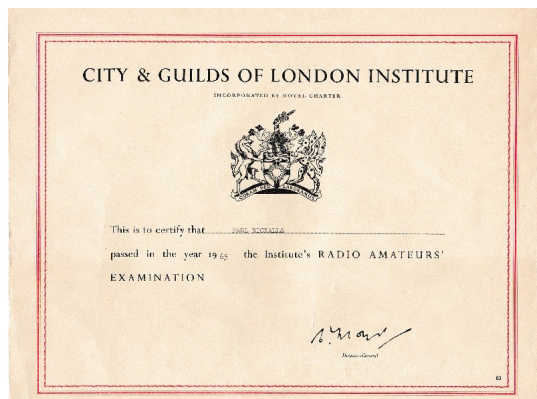
There are currently 48 members of this useful group. Most TDARS members belong.

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Whilst Minos is the preferred logging program used by the club, individual members are free to

Continued >>>>



I went to download the current version of Minos (V2.3.0.0), but found my shack PC could not cope with it. This was just 15 minutes before the Saturday 6 metre slot was due to start.
PANIC !

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PANIC !

Ah well—back to faithful old paper logbook and pen. But with a prospective large-ish number of QSOs on 6m (I won the 6 hour section of 50MHz Trophy in 2019 using the club call !), I definitely needed some form of check-log to avoid duplicate QSOs.

Then I remembered the system I used long, long ago—and here it is for this year's event: Piece of A5 paper. Letters A to Z down left (long) side. For each complete QSO, take last 3 (or 2) letters. So G0LGS would appear as LGS against the letter 'L'. Here's part of my instant check-log sheet: (all handwritten on the day). A new sheet of paper for each band.

K KEP KNV ⁹ KYC

L LGS

M MDJ

N	NPK	NBS	NUM
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etc etc

I had about 120+ QSOs on 3 bands for VHF NFD 2020, using this simple check system, and had just one 'dupe' overall. Not bad—but a bit of a drag when it came to entering each QSO manually after the contest finished. But been there, done that, got the T-shirt.

Finally, (almost) Heather (M0HMO) circulated her comments after the weekend:-

“Wow, thanks to everyone who turned up on the 2m contest. I think Paul had 5 QSOs on 144.600 FM which really added to the numbers nicely. Also I counted 4 (I think) TDARS members on SSB but Paul rattles through those contacts so quickly I don't always recognise the callsigns so I may have missed people.

Everyone who came up on 2m FM got it exactly right with serial number, report and location. The contest rules accept that some people don't know their maidenhead locator. As long as we can work out where you are then that is sufficient for the "correct exchange of location" to apply. Hopefully it gave some people a chance to try contesting or get back into contesting? Getting Ray (2E1HTU) was an unexpected bonus - nice one Ray!

Conditions weren't great for us here in the Apedale Valley but Paul has logged QSOs in GD, GM and GI so it wasn't all bad. In the last 10 minutes there was a slight opening out East and I think Paul worked a JO station which is quite unusual for our QTH.

Admittedly not as much fun as the "real" VHF National Field Day, but it was pretty good fun setting up for lots of different bands over the past 24 hours, I was so close to getting the 4m rig working but sadly not quite close enough!! For the club entry it is only the best 3 bands that count anyway. We used the club rotator and trailer mast (parked in our drive) for the 23cm set-up as there isn't room on our big mast for that many antennas so at least the second trailer got to be involved in the contest if not all the club tents and other kit!

If anyone needs a hand with submitting logs just let me know. You don't have to submit a log for the recipient to claim the points, but it does add a bit to the whole experience I think and you "have to be in it to win it" always applies. You never know ... it might be that very few people put in a log for your combination of licence level, power and band and you might come out better than you think! "



The photo ? Well it was taken 10 years ago on VHF NFD on Long Mynd. Things (and people) have changed . !

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## **Dx Report—6 metres—13th June**

I was trying and trying to get the Chad station - must have been for an hour, then see the JT off the back of the beam - so beaming almost straight north I got him. Well pleased ! (from) Dave G0CER [JT—prefix for Mongolia—Ed]

Just worked him: doing the New Country Dance ☐ Cheers (from) Paul M0PNN

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DMR Hotspot Kit by Mike G6DFD

I was looking for a lockdown project and I've been itching to buy a Raspberry Pi for ages, but I wouldn't buy one without a definite use. Then I read about a project that combined Amateur Radio & Raspberry Pi. I bought a Hotspot (MMDVM) Hat Board, as they are called. The small transmitter (only 10mw) connects a DMR handheld to Repeaters & Talk Groups via your home router. It's NOT "real" radio so most need not read any further.

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Now that it's just us open minded Hams, I can explain more. I ordered the board from the land of the Kung Flu via Ebay, it was only £24 including postage and no tax LOL. I didn't expect it to arrive for weeks (if at all) so I was pleasantly surprised when it arrived as described in 10 days. Next I ordered my Raspberry Pi Zero (W H) from the Pi-Hut it arrived in 24 hours, wow !

The kit from China includes a metal case and the screws to fix the 2 boards together. You also get a rubber duck antenna. Assembly was easy and straightforward.

Now came the more challenging part of the project. Flashing the OS to the SD card that I pinched from a smart phone no longer used and configuration. This was a challenge because I'm still using XP on my nearly 20 year old IBM Thinkpads. The only thing I use them for is programming radios, having long since moved to Tablets for everything else. I eventually found some software that would flash SD cards on XP.

The software that runs the Hotspot is called Pi-Star, it's a free download. Next step was configuration, which can be done in a variety of ways. First I used old faithful (Thinkpad) via the wifi from the Raspberry Pi Zero W. Then I got more adventurous, putting the devices IP address into my Amazon Firestick via a browser on the TV, clever stuff?

After watching several "how to" videos on the YouTube posted by our over excited American cousins, I finally cracked it and Talk Group 91 burst into life from my Retevis RT3 DMR UHF handheld.

I should say I've had the RT3 for years and had programmed the code plugs before, (another YouTube how to video if you haven't).

My DMR radio is an old one but the new dual band version is on Ebay (from Walsall) at only £80. DMR radios are a fraction of Dstar or Fusion equivalent and are well worth using to explore digital radio.

I've been using the Hotspot now for a couple of weeks and have been well entertained for what the project cost, I've also learned a lot from the experience. I can link into all the DMR repeaters in Shropshire (Salop Cluster) and that's a brilliant resource for mobile users in the county. I also have access to UK Talk Groups and TG91 worldwide which is never quiet. Although it's an unwritten rule not to work stations in your own country via the worldwide TG91.

The Hotspot boards can also work with D-Star handhelds and the larger Raspberry Pi models and there is even a Duplex board with two Antennas. Clever people these Chinese.



RSGB remote invigilation extends to Intermediate exams

Following the success of remote invigilation Foundation exams, the RSGB is pleased to expand that to include Intermediate level exams.

From Monday 13 July the **automated exam booking system** will accept bookings for both Foundation and Intermediate level exams.

Please note that the earliest available bookings for exams at either level are during the second week in August.

The requirement for Intermediate practical assessments is waived until further notice but will be reviewed at a later stage.

Criggion MW—as it looks today ! By Robert 2W0FOI



1. Main test bench (1960's style). Mainly older test equipment but still usable. Stuff like HP141T main frame spectrum analyser (x3) with RF plug-ins (8553B 0 -18GHzs) , (8554B 0 -1200 meg) and (8553B 0-110MHz) plus the 8552B IF section....real boat anchor stuff, but still works...mostly. Lots of R&S and W&G signal generators. I can barely lift the R&S 0.14 to 525MHz's SMDU. Now you can get a hand-held version. I do have modern spectrum analysers just in case you wondered.
2. Centre frame, a 3.975MHz home brew 100W+ AM transmitter using push-pull output, gas regulators and 1930's pentode valves. Note wooden chassis. There is a good story surrounding the build of this Transmitter. It was not built by me, but a Ex BBC engineer. A B40 (Murphy) boat-anchor receiver, old analogue spectrum analyser that only works well when its cold due to heat dissipation problems.
3. Marconi R28 communications receiver. The pinnacle of valve receiver design with 40+ valves. R&S SK050 500W AM transmitter. 1.5 to 20meg (on a good day) uses 16 selenium rectifier modules to generate the 3KV HT. Weighs 300Kg+. R&S SK010. 100W version of the SK050. Uses the same 3 modules, regulator (5 x EL34's), synth and modulation shelf (plus VCO for the 0 - 100KHzs).
4. Lower middle frame Collins, 618s-4 aircraft transmitter. The very first auto-tune HF transmitter + ATU (ATU out of frame). Alas work in progress on this one. I am missing the control 6140 control head and cabling. It also needs 144 crystals for all the channels. Probably only a museum exhibit or a door stop, alas. The control heads are seriously rare (like hen's teeth).

Loads of stuff not mentioned but can talk it through on the virtual tour...if you can stand the suspense. [Wednesday 26th August—virtual tour via Webex—Ed.]

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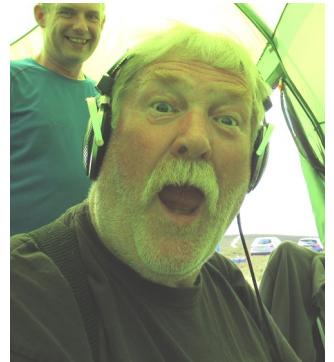
Note from Shropshire RAYNET (Mark Jones M1DQI)

Annual Long Mynd Hike in October has been cancelled.

Weekly net Fridays at 20:00 local: 144.775 MHz FM

3 months in Lockdown. By Simon G0UFE

Over the weekend of the 21st to the 22nd of March I received 4 telephone calls from the places where I was working at, telling me not to go back to finish the work I had started. In fact all my work for the next 3 months stopped, so two private homes, one home for adults with learning difficulties and a doggy hotel at Sutton Maddock didn't want me to finish the work I had started, plus about 5 or six other jobs which were in the diary to be started.



Getting up on Monday the 23rd March, my wife asked me what I would be doing until I could go back to work. After a cup of tea and a bacon sarni, I said I would start by tidying up my shack. Wifey suggested that being as it had not been decorated for over 25 years it was a good time to do it. So upstairs into the shack I went. I started by taking the 30-plus years of Radcom and PW off the shelving, and putting them in the spare room. The shelving had seen better days so I decided to replace it with new, and even more shelving to put more stuff on. Over the next two weeks I painted the walls ceiling and woodwork, got the shelving and fitted it. Got rid of quite a bit of junk, old bits of cable plus a good thinning out of Radcom and PW.

It was then I thought I should pay some attention to the mast and antennas which again have had little attention. So I painted the base post of the mast and greased all the pulleys and bearings. While doing this I noticed that the winch which raises and lowers it was getting a bit rusty and worn, so I decided to get an electric winch. A company called Goodwinch Ltd, which also advertises in Radcom etc, had a very good review, and because it was tiring winding it up and down, one was purchased and a week later it arrived. Now at the press of a button and with very little effort I can raise it to full height and down again in minutes.

As the mast was tilted over, I purchased and fitted an antenna for 23cms, a band I had never used before, a Comet CYA 1216E 16 element along with 25 metres of M & P ultraflex 13 coax plus N type plugs. It works very well for the size with contacts made in the UKAC contest up to 97kms away,

The 2 metre crossed antenna, for satellite work, had one of the baluns broken so a new one from Hy-Gain was obtained. This helped get the SWR down to a respectable 1.17 to 1 at the top end of the band and 1.5 to 1 in the SSB section. So for the last three months I have painted, cleaned, repaired and improved my station and I am XXXX pounds lighter (in the pocket) but it was worth it. There is still more to do but had it not been for this lockdown, I would have not done as much. [P.S. Photo taken on VHF NFD 2019: equally shocking —Ed]

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## E-mail (30 June) from Paul M0PNN re N7DDC Auto ATU Kit

I am putting together 10 for a club project. I have soldered in the PIC IC, header pins, and a cap. and written the hex file to 10 boards. I soldered the PIC IC by lining up the ic pins hold with blue tack. Then tack one end check it, then flood the pins with solder and draw off excess solder with good quality solder wick.

There's not much interest in construction so there will be some full kits available with detailed instructions and all the surface mount parts fitted. I was hoping to sell them at cost price on the TDARS HamFest stand in September just to get my money back.

Thanks everybody who has asked - the list is now full. I will e-mail off list.

## Trusted Traders? - By Peter G4URT

There seems to have been a spate of adverts on the goggle box for a company called 'TrustedTraders'. Used for services such as gardening, building plumbing etc, but why not have an amateur radio site? When I purchase anything be it services or products I like to check out other peoples experiences but lets face it – reviews on some sites are somewhat less than decent, honest or truthful! In fact sometimes you wonder if the seller themselves (or their parents) have actually written the testimonials themselves.

So maybe it would be a good idea if members wrote up their experiences of products or services that they have purchased to give an idea to prospective purchasers? It doesn't need to be in depth or technically based – just something to use as a guide. So, here goes...

I've been spending the past weeks getting my 2m array back up and working. That means replacing and updating several items not at least the mast. I bought a secondhand tower off Ebay late last winter and it came with a couple of Fulton braked winches. They weren't in the best of condition and an internet search proved fruitless for spares / service parts. Not wishing to have several hundreds worth of antenna / rotator making a hole in the garden, I asked around on a forum called MoonNet and was put onto the Tiger winch range. Guess where they are made? And guess how much cheaper they are than the American made Fultons? Yes, China and cheaper and the quality is better so we have a winner here.

As you can see the only issue is the colour! However, at least I'll be able to find them when its dark and I need to luff the tower down in a hurry.

There are several suppliers in the UK. I used dlhonline as they were the cheapest. Details below:

<https://www.dlhonline.co.uk/tiger-brake-hand-winch-bhw-series-painted-finish>



The winches are available in several capacities. I just bought the biggest. They also do the correct wire rope as well. If you are buying from them do not do it online via the website. Email them for a quote including postage. This takes a bit longer but the postage charge will be less as they give a customised price instead of a standard price which is a tad steep.

I also use 'pulled' Andrew Heliac as feeders for the array. When I came to install the 2 lengths of LDF-450 which serve as the receive feeders, I was horrified when I put my FA-VA5 analyser across them. They were not performing at all well, so I checked out the plugs. As I had used them in my previous QTH and they were exactly the right length, I didn't really check them out as I knew the previous 'owners' quite well. Checking the plugs was a revelation – they were badly installed / soldered and not exactly fit for purpose. Again, a search on Ebay (which is your very best friend when it comes to finding odd bits and pieces, bolts, fixings - you name it) came across the following site :

<https://www.ebay.co.uk/str/m0mat/>

This site is run by Matt M0MAT (see QRZ.COM as well). I e-mailed him with a query regarding his Heliac type plugs as the cable I had, although marked as 'Andrew' had an unfamiliar number type. A couple of e-mail exchanges later he told me what he thought the correct plug would be, but if they didn't fit send them back for a refund. 2 days later they were on and working well. These plugs are solderless and come with good instructions and are easier to fit than the Andrews ones.

Usual disclaimer. No connection with any of the two suppliers, just very satisfied.

That's my experience. How about you.....?????

Peter G4URT